Keeping People Well Despite Life Change Crises

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TOO MUCH CHANGE, TOO SUDDENLY, and within too short a period can precipitate deleterious physical and emotional reactions in human beings, according to Toffler (*1*). Yet there are people who, in spite of many life changes, do not, as a result, experience physical or emotional disturbances. Do these people possess certain attributes that help them withstand the pressures of many life changes? The research reported here was focused on the selected factors that might help a person offset the impact of the rapidly increasing changes that characterize our life today. The results, we believe, suggest the need for an expanded and creative role for community health workers, who are constantly in contact with people experiencing life crises because they have to face too much change in too short a period.

Background of Study

Most of the research approaches seeking to understand health and disease have been directed at exploring the factors associated with the disease process. Today it is generally accepted that disease results from an interplay between a variety of factors operating within the individual and his environment. Thus, genes, nutrition, immune mechanisms, social roles, stress, socioeconomic status, climatic and atmospheric conditions, and many other factors all may help determine whether or not one remains well or succumbs to illness (*2*). Many researchers, particularly in social psychiatry, have focused on environmental, social, and emotional factors in attempting to explain the etiology of disease. Much of the work has dealt with a broad concept of stress, one that includes those factors disruptive of personal, social, and cultural processes (*3–6*).

About 20 years ago, Holmes and associates began a systematic study of the quality and quantity of those life-changing events that appeared to cluster around the onset of illness, both preceding and ac-

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companying it (*7*). To assess the impact of these events, Holmes and Rahe devised what they called the Social Readjustment Rating Scale (*8*). The scale included many events typically stressful in nature, such as divorce, death of a spouse, or loss of a job. The scale also included many events considered to be desirable or pleasurable, such as marriage, a business promotion, retirement, or a vacation. However, one theme common to all of the events was that they evoked or were associated with some coping or adaptive behavior by the persons involved.

The Social Readjustment Rating Scale contains 42 items, each of which has an assigned numerical value derived from a constant referent technique; (for example, marriage change was assigned 50 points, and other items were over or under 50). The scale is designed to reflect the magnitude of the change required in a person's life adjustment as he experiences each of the listed events. The values and scores are referred to as life change units (LCUs). The scores range from 100 for death of a spouse to 11 for a minor violation of the law. The term "life crisis" refers to a great clustering of LCUs over a 1- to 2-year period. Based on empirical results, Holmes and Rahe identified a mild life crisis as 150–199 LCUs, a moderate one as 200–299 LCUs, and a major one as 300 LCUs and over. The life change units for the life events along with their scores are as follows:

Life events	*Mean value*
Trouble with boss	23
Change in sleeping habits	16
Change in eating habits	15
Revision of personal habits	24
Change in recreation	19
Change in social activities	18
Change in church activities	19
Change in number of family get-togethers	15
Change in financial state	38
Trouble with in-laws	29
Change in number of arguments with spouse	35
Sex difficulties	39
Death of close family member	63
Death of spouse	100
Death of close friend	37
Gain of new family member	39
Change in health of family member	44
Change in residence	20
Minor violations of the law	11
Jail term	63
Business readjustment	39
Marriage	50
Divorce	73
Marital separation	65
Outstanding personal achievement	28
Son or daughter leaving home	29
Retirement	45
Change in work hours or conditions	20
Change in responsibilities at work	29
Fired at work	47
Change in living conditions	25
Wife begins or stops work	26
Mortgage over $10,000	31
Mortgage or loan less than $10,000	17
Foreclosure of mortgage or loan	30
Vacation	13
Change in schools	20
Change to different line of work	36
Begins or ends school	26
Marital reconciliation	45
Pregnancy	40
Personal injury or illness	53

The major premise in the research efforts of Holmes and associates was that any change in one's life pattern required a change in ongoing life adjustment and tended to be associated with the onset of an illness (*9*). The greater the magnitude of the LCU, the greater the probability that there would be a change in health status. This hypothesis has been borne out in a number of retrospective and prospective studies over the past several years, which have found a high degree of association between a life change crisis and health changes (*9–11*).

Holmes and associates (*9*) also recognized that not all persons experiencing a life change crisis undergo a health change within a 2-year period. They speculated that these persons might have certain psychosocial assets that helped them to adjust to mounting life changes without undergoing physical or emotional problems. A search of the literature for clues to these assets did not reveal anything specific, particularly in regard to persons undergoing high levels of change in their lives. We found several studies, however, in which good health and the factors associated with it were examined. In some of these studies, positive relationships were reported between good health habits, the possession of social assets (such as strong family support, close friends, and financial stability), a positive mental outlook, and good health (*12, 13*). Could these assets serve as balancing factors in helping people withstand high levels of change in their lives?

The major focus in our research, then, was on the variables that might temper life change and enable people to withstand high degrees of it without experiencing illness. Specifically, our purpose was to

examine the relationship of three major variables—health habits, social assets, and psychological well-being—to alterations in health status in the presence of great life change.

Data Collection and Study Sample

Questionnaires were mailed to 1,145 residents of Renton, Wash., whose names were obtained by systematic selection from a commercial directory of householders. One hundred and eighty-five questionnaires were not delivered because the addressees had moved. Of the remaining 960 questionnaires, 548 (57 percent) were returned by the selected household respondents. Twelve questionnaires were so incomplete that they could not be used; 536 were usable.

The ages of the respondents ranged from 18 to 72 years; their mean age was 39.69 years. The sample was predominantly white (98 percent), but all socioeconomic levels were represented according to the Hollingshead Two Factor Index of Social Class. Forty-four percent were men, and 56 percent were women.

Survey Instruments

A questionnaire was prepared to elicit information about each of the five major variables (*14*). Each questionnaire was a single-score instrument.

Health habits. Items to be included in the health habits instrument were selected on the basis of an inter-item analysis. Four items (pipe smoking, drinking tea, drinking wine, and participating in sports) were discarded because of their low correlation with the sum of all the items. The final scale contained 19 items that were designed to measure the subject's current "good" or "poor" health practices. Included were questions about eating habits, weight, exercise, smoking, drinking of alcoholic beverages, drinking of coffee, and dental flossing.

Social assets. Two instruments were devised to measure the magnitude of the social support systems that had been operating in the subject's past life and those that were operating in his present life. Again inter-item analysis was used to select and score the items. The instrument on past social assets contained items about childhood relationships with parents, parents' marital relationship, respondent's scholastic record, and the financial situation while the respondent was growing up. Four items about marital status, living arrangements, number of children, and number of close friends were included in the present social assets instrument.

Psychological well-being. The single-score index of psychological well-being devised by Bradburn (*15*) consists of eight items reflecting a balance of positive and negative aspects of a person's subjective experience, such as excitement, accomplishment, pleasure, loneliness, boredom, and depression. This index has been used successfully as an indicator of mental health and was the one we used.

Life change. A person's life change was measured by calculating the life change score (LCUs) from the responses of subjects on the Schedule of Recent Events as developed by Holmes and Rahe (*8*). The instrument was modified for our study to include life change for the periods of 0–1 years ago and 1–2 years ago. The weights used to score the items were the same as those devised by Holmes and Rahe. Scores for the two periods were summed to derive a single score for the 2-year period.

Health status. "Alterations in health status" was designated as the dependent variable in our study. The term was defined as any major change in health that had occurred during the preceding 2 years. Respondents were simply asked to indicate whether or not they had experienced such a change.

Results

Our primary method of analysis was linear correlation and multiple regression. Only the most important and significant results of this analysis are reported here. A complete account of the multiple regression analysis is available elsewhere (*14*).

The table shows that when all the variables were considered, the strongest relationship existed between the magnitude of the LCUs and major health change. The relationships found between the other three

Range, mean, and zero-order correlation of variables with major health change

Variables	Actual range	Mean	Correlation [1]
Life change units (LCUs)	0–2,686	503.50	0.32
Health habits	0–6.62	4.25	−0.12
Psychological well-being	0–7	3.98	0.12
Past social support	0–5.64	3.94	−0.12
Present social support	0–2.36	1.98	−0.08
Sex	0–1	0.44	−0.14
Social class [2]	1–5	3.15	0.11
Age	18–72	39.69	−0.02

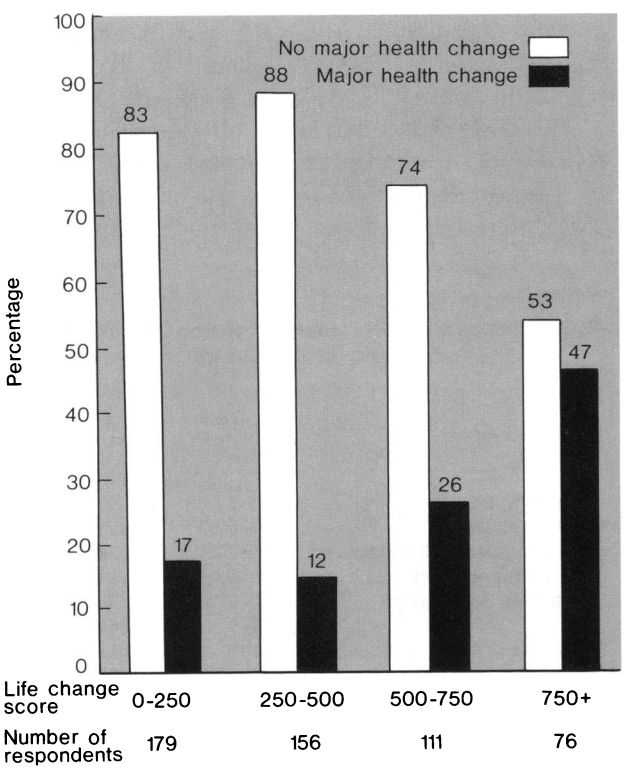
[1] $P<0.05$ except for variables "Present social support" and "Age."
[2] Hollingshead Two Factor Index of Social Class.

major variables—health habits, psychological well-being and past and present social support—and major health change were weak. These results suggest that although health habits, social support, and psychological well-being may have some small effect on a person's health status, the magnitude of the change in the person's life is still the single most important variable in determining whether or not that person will experience a major change in health. This conclusion was borne out in a series of multiple regression analyses. The magnitude of LCUs accounted for 10 percent of the variance in major health change, whereas all the other variables, including sex, age, and social class, accounted for about 4 percent.

The zero-order correlations also suggested that women and persons at lower socioeconomic levels tended to report slightly more major health changes when changes took place in their life status. In the multiple regression analysis, however, these factors did not account for a significant amount of variance in major health change (*14*).

The chart illustrates the relationship of the magnitude of LCUs to reported major changes in health.

Percentage of respondents not reporting any major health change and percentage reporting such a change, by life change units (LCUs)



One can readily see that as the LCUs increase, the risk of becoming ill also increases. Almost 50 percent of the people with high levels of life change (750 or more LCUs) reported a major change in health. This result is consistent with the results of previous research by Holmes and associates (*9–11*), in which they found that more than 50 percent of the persons reporting major health changes had high levels of LCUs.

There are many unanswered questions as to the significance of various factors or characteristics in tempering life change in such a way as to maintain wellness. Except for life change, the variables we studied made only a slight amount of difference in determining whether or not a major illness would occur. Certainly, more research is needed in this area.

Implications of Current Study

The discussion of the implications of our study is limited to those that can be drawn from the relationship between life change crises and a person's health status. Workers in the helping professions—nurses, physicians, social workers, mental health outreach workers, physical therapists, and volunteers—can use this knowledge in their efforts to place more emphasis on wellness and the maintenance of good health. These workers can take an active part in devising and implementing tools with which to assess the amount of life-change crisis people are experiencing. With these tools, the workers may be able to predict the people for whom a high amount of life change can be expected in the future. In addition, the workers will be able to expand their teaching skills so that they can help people learn how to assess themselves, become aware of the symptoms of excessive change, and develop coping mechanisms. Rogers has stated that if our present culture survives, it will be because we have been able to develop people for whom change is a fact of life and who are able to live comfortably with it (*16*).

Community workers are in a unique position to identify the persons who may suffer an illness following significant life changes. To reach people before illness strikes should be our focus in health education and in the prevention of illness and accidents in the community. But how can the community worker assist people before they become ill or have an accident? Even today community health workers, with all their activities in various kinds of clinics, schools, homes, and agencies, come into contact professionally with more well people than sick. Knowledge of the effect of life changes on illness and accidents should

serve as an impetus to the planning of programs aimed at preventing life-change crises. We community health workers can identify people in great life-change crises, assess the amount of life change the person has experienced, and teach people about life change and its possible effect on wellness.

Identifying people in life-change crises. Our priority will have to be those people who we believe can benefit the most from an educational approach. Primarily we will be looking for those with high life-change scores. Because moving to a new residence is an identifiable change that is a part of many other adjustments like a change in job, school, friends, or church—to name a few—it is one of the first and best ways of identifying the people we want to serve. Recent studies in our community of Renton, Wash., indicate that at least 25 percent of the population move every year.

In this geographic area, people recognized a need and formed a club to help newcomers adjust to their change in residence. Business people saw in new residents a group to whom they might profitably advertise their products. Health workers also can locate or make contact with new people by the same methods.

Since death of spouse scores highest on the life-change crisis scale, we should look at the needs of the spouse who is well during the time of terminal illness of the other spouse. Since we frequently care for patients, and particularly elderly patients, in their homes, we are in an opportune position to focus on the prevention of disease or accidents before they occur.

Another group of persons known to the community worker is comprised of parents seeking divorces. These persons often first become known through problems with their children. Changes in living patterns, income, and social life are numerous for this group. Chester noted that the health of 85 percent of those in the divorce channel was affected (*17*). Many of these find their way to the physician only after they become ill. Community workers are in a position to initiate help before an illness becomes severe.

We are already in touch, of course, with many of the people who would be considered of high priority for help. For example, there are the hundreds of young adults who flock each week to the family planning clinics. We have not tried to provide them with health education beyond their family planning and venereal disease needs. The women attending these clinics are usually well, but we can predict many life changes for them during the next few years. If our focus is really prevention, then we must establish health education programs that will support and maintain that wellness.

Other groups presenting opportunities for promoting wellness can be found living in rather confined and crowded conditions, even in rural areas. Audrey stresses that high density increases change and that we have less control over the change that takes place (*18*). Low-income housing projects and retirement centers are increasing. Do we have to wait for a referral based on abuse of alcohol and drugs, the abuse of children, or vandalism before we make a move? The community worker can expand her skills and focus on these people with overwhelming life change, attempting to reduce the incidence of illness and accidents among them.

Assessing life change a person has undergone. The simplified version of the tool of Holmes and Rahe (page 344) can be used to score the amount of life change a person has experienced. The data obtained with this tool or similar ones need to be included in all histories. This kind of assessment could be of value in working with the parents of the children we see in the clinic, could aid us in the group education of new mothers, could be used in home visits as part of a family assessment, and would be of help in community surveys of health needs.

Such an assessment includes the recognition of the symptoms of life change—anxiety, insomnia, heart palpitation, and disorganization. To help the people exhibiting them, health workers need to be aware that these symptoms may be associated with great life change. Jourard has said that if we could only learn to recognize the warning signals of impending illness, diagnose them, and institute corrective action, we could live 100 years (*19*).

Teaching people about life change and its effect on wellness. The method community workers have used most widely to teach people about life change and its effects has been one-to-one contact. And for many of the people whom we serve, there seems to be no substitute for this kind of trust-building relationship. Often it takes not one contact, but at least two, to build the trust needed before a person can be transferred to a group educational experience. Some of the more secure people, however, may be able to move directly into a group. Group education has been demonstrated to be effective, in that members of the group can help each other learn about methods of coping (*20, 21*). With the community health

worker as a guide, it could prove helpful in teaching people to do their own assessment of the magnitude of the life changes they experience.

People have different degrees of tolerance to change and adapt to and cope with it differently. In a group, a person can be influenced by peers with similar problems, according to Stewart, and thus can develop additional ways of coping (*22*). Identifying one's coping strengths and sharing them in a group can help a person make conscious decisions and develop the skills needed to manage change. By being a participating member of a group, the person has an opportunity to actually take advantage of some of the best coping mechanisms there are—effective communication, openness, and the development of meaningful personal relationships. Experience in a group also will provide an opportunity to develop problem-solving skills and decision-making ability. Members of the group can learn to anticipate change and prepare for it.

According to Toffler (*1*), we can assign probabilities to some of the major changes in our future and thereby become the managers of our change. Some changes, like completion of school, children leaving home, the addition of new family members, can in some measure be anticipated. When changes pile up, sometimes some of them can be delayed, such as changing one's residence or a job, so that the amount of change at any given time will not cause a loss of balance.

Community health workers can help prevent illness from occurring in well people by identifying the persons with potentially high scores on a life-change scale, assessing the amount of change these persons undergo, and providing them an opportunity to learn how to manage changes in their lives in such a way as to achieve some balance and avoid illness.

To combat the ever-spiraling number of changes in our lives and the lives of those we serve, we community health workers may need to consider including an assessment of life change when we screen patients, along with taking their blood pressure. We may need to set up a "hot line" for people who are showing symptoms of too many changes and wish help in reducing them. Providing a community health "quiet center" where people can be free of constant turmoil for a few hours, or even days, may enable them to cope with change without becoming ill.

As community health workers, we are committed to the promotion of wellness. Using our knowledge of the relationship between changes in life and the onset of illness, we need to expand into new types of prevention and health education. With the tools we have, we can assess the life change people face and aid them in adapting to it and adjusting to the pressures in their lives.

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